### HD 1751 A49 The

# AGRICULTURAL SITUATION

**Bureau of Agricultural Economics** 

U. S. Department of Agriculture

Volume 32

**MAY 1948** 

Number 5

What ERP Means to Farmers	N. Koffsky	1
Outlook Highlights		2
Corn Borer in 28 States	George L. Davis	4
Biggest Sweetpotatoes Not Best	J. M. Baker	5
10 Years in Poultry	Gerson Levin	7
How Much Can We Increase Production		8
Farm Land Values Equal 1920 Peak	A. R. Johnson	11
Sharp Drop in Cattle on Feed		12
More Farmers Own Land	B. T. Inman	13

### What ERP Means to Farmers

ARGE exports for at least another year were assured by the European Recovery Program passed by Congress in April. However, exports in the next 12 months probably will be below the 1947 rate with the biggest drop in farm products.

Congress authorized 5.3 billion dollars for the European Recovery Program for the year beginning April 1, 1948. The Program was included in the Foreign Assistance Act which also authorized 800 million dollars for economic and military aid to Greece, Turkey and China. The ERP countriesthe 16 participating countries\* and western Germany-have long been important customers of the United States. They took about 40 percent of U.S. exports before the war and about onethird in recent years. Much of our agricultural exports also have gone to these countries. In 1947 when agricultural exports totaled 3.9 billion dollars, they took more than half. This is about the same proportion as before the war when exports of farm products were less than a fifth as large as in 1947.

Although the 6.1 billion dollars provided by the Foreign Assistance Act is larger than U.S. Government aid in 1947, foreign countries will have fewer dollars available from other sources. Last year, the U.S. exported the amazing total of 196 billion dollars worth of goods and services to all countries but imported only 8.3 billion dollars. worth. This left a gap of 113 billion dollars that had to be financed by means other than imports. U.S. long term loans and grants provided 5.7 billion dollars, most of which went to ERP countries. Foreign countries financed most of the remainder by selling gold and short-term dollar assets.

Foreign countries will not be able to continue selling their gold and other assets at the 1947 rate. They also will not be able to increase their exports to the U.S. to any important extent. As

(Continued on page 3)

<sup>\*</sup>Austria, Belgium, Denmark, France, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Sweden, Switzerland, Turkey, and the United Kingdom.

### **Outlook Highlights**

Farmers' prices generally have risen since the February break in some commodities. In mid-April, the index of prices received by farmers was up almost 3 percent from mid-March, but was 5 percent below the January record. The index of prices paid by farmers including interest and taxes rose nearly 1 percent. As a result, the parity ratio increased to 117.

During the next few months, prices farmers will receive will depend more and more on prospects for new crops, both in the U. S. and abroad.

Two recent developments affecting the demand for farmers' products are: 1. the reduction in income taxes; 2. passage of the European Recovery Program authorizing 5.3 billion dollars for foreign aid. Both will help hold activity in business and industry near present high levels. Income tax reduction will add about 5 billion dollars to the income consumers will have to spend. ERP assures farmers that foreign takings of their products will be large again next year, though they may drop below last year's record.

If Congress approves requests for increased funds for national defense more than 3 billion dollars would be added to the original military budget. This

The Agricultural Situation is issued monthly by the Bureau of Agricultural Economics, United States Department of Agriculture. It is published by direction of the Secretary of Agriculture as administrative information required for proper transaction of the public business and approved by the Director of the Budget.

Editor: Wayne Dexter !

Single copy 5 cents, subscription price, 50 cents a year, foreign 70 cents, payable in cash or money order to the Superintendent of Documents, Government Printing Office, Washington 25, D. C.

The AGRICULTURAL SITUA-TION is sent free to crop and price reporters in connection with their reporting work would chiefly affect the metals industry. The supply of metals and metal products already is short compared to demands. With increased outlays for national defense, prices of these products would be likely to continue to advance.

Farmers' production costs probably will remain near record levels during 1948 but the supplies of many items will be improved. The labor supply may be larger and the general skill and experience of workers is expected to be improved. Farm machinery is being produced at record rates. Even with larger exports likely, more new machines probably will be available than in 1947. Feed costs are expected to remain high, at least until new crops are harvested. Fertilizer prices are likely to remain above 1947. Supplies of nitrogen, phosphoric acid, and potash have been increasing, but nitrogen and potash probably will be short compared with current demands. In general, farm building materials, containers, insecticides and fungicides and some other supplies will be easier to get than in 1947.

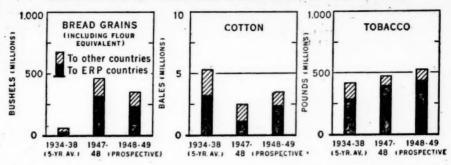
Prices of meat animals probably will stay near April levels for the next few months when meat production will be seasonally small. In April, meat animal prices were the highest on record for the month but still below January.

A wartime development in the meat industry was the sharp increase in canned meat production to meet military needs. Many new products were developed and many of them are now being promoted for the civilian market. In 1947, 8 pounds of canned meat per person were available to U. S. consumers compared with 5 pounds in 1939. Consumers seem to have developed a taste for many of the canned meats, both old and new, and output probably will stay well above prewar.

Consumer demand for milk and milk products will continue very high for the next several months. Export and storage demand for the major manufactured dairy products also will be strong. As a result, farmers will continue to receive substantially higher prices for their milk than last year.

(Continued on page 16)

### U.S. EXPORTS OF SPECIFIED AGRICULTURAL COMMODITIES



U S DEPARTMENT OF AGRICULTURE

WEG 46727 BUREAU OF AGRICULTURAL ECONOMICS

### What ERP Means to Farmers

(Continued from page 1)

a result, total U.S. exports are expected to decline slightly below the 1947 rate.

### Crop Prospects Improve

The value of agricultural exports will be down even more—perhaps 15 to 20 percent. This prospect is based largely on the outlook for larger crops in Europe this year. Since the end of the war, and especially in 1947, European harvests have been poor. The chief concern of most Europeans has been the problem of where their next meal is coming from. If bigger crops this year help free Europeans from the pressure of want, they are likely to import less food and more of the items they need in building up their industries.

Among the farm products, wheat exports are likely to be most severely affected. Prospects are that U.S. exports of bread grains might be down as much as 25 percent from 1947-48. Even with

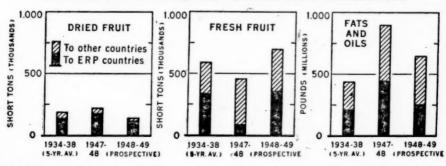
this reduction, however, wheat exports probably will be five to six times prewar. Exports of fats and oils also are likely to decline. On the other hand, shipments of cotton and tobacco probably will be greater than last year. Among the important farm products, only cotton exports are likely to be below 1934–38, probably about one-third. Comparisons for important commodities are shown in the accompanying charts.

#### Three Main Effects

In general, the effects of ERP on U.S. farmers' prices and incomes fall into three groups: 1. the direct effect on foreign demand for U.S. farm products; 2. the indirect effect on U.S. demand through the impact of ERP on business conditions; 3. long-term effects.

Direct effects. Foreign demand for U.S. farm products in 1948-49 will be weaker than in 1947-48 but strong enough to help hold farmers' prices and incomes near 1947 levels. The value of agricultural exports will be

### U. S. EXPORTS OF SPECIFIED AGRICULTURAL COMMODITIES



U. S. DEPARTMENT OF AGRICULTURE

NEG. 46727 BUREAU OF AGRICULTURAL ECONOMICS

around four times prewar. The gain is chiefly due to higher prices and only partly to a greater physical volume.

Under ERP, considerable quantities of farm machinery and fertilizer will be shipped abroad and farmers may continue to have difficulty in obtaining as much of some items as they want. However, no serious trouble is likely.

Indirect effects. By assuring large exports for another year, ERP will help keep U. S. industrial production, employment and incomes high. The large exports of recent years have been one of the main forces behind the high level of business activity. This has been reflected in a very strong demand for food and other farm products.

In addition to ERP, the reduction in income taxes will help keep economic activity high. This will add about 5 billion dollars to the incomes consumers will have to spend in the next 12 months. Additional military expenditures now being considered by Congress also would affect business. If the request is approved, the nation's military budget would be increased more than 3 billion dollars above the original budget. As a result, business activity this year probably would hold close to 1947.

#### Slightly Weaker Demand

In view of prospects for both foreign and domestic demand for farm products, over-all demand seems likely to be weaker than in 1947 but stronger than in 1946. As a result, farmers' prices and incomes in 1948 may average slightly below 1947 but higher than a year earlier.

Long-term effects. Without the ERP or a similar program, exports of farm products would have declined much more than the 15 to 20 percent now expected. However, these countries would have had to buy large quantities of food to maintain diets at even a subsistence level. This would have left little of their funds for the purchase of materials and machinery needed to rebuild their war-wrecked industries. As a result, the reconstruction of Europe would have been delayed and with it the prospects for a stable foreign market for U. S. farm products.

N. Koffsky Bureau of Agricultural Economics

### Corn Borer Is Now Found In 28 States

THE European corn borer continued its westward march last year and now has become a pest of first importance to corn growers in the western part of the Corn Belt. Today it is known to occur in 28 States.

The distribution is general from northern Maine through New England and westward through the States of the Great Lakes area, and the pest has now crossed the Missouri River. The southern-most points of infestation are represented by a few counties in the northern part of Tennessee, and by Carteret County, in eastern North Carolina.

Damage last year was estimated at almost \$97,000,000. The estimate is based upon a recently completed survey by the Bureau of Entomology and Plant Quarantine and cooperating State agencies. In 1946, the damage was estimated at \$37,000,000. In 1940, it was only about \$6,500,000.

In the States that suffered the most damage from the corn borer last year, the estimated losses were: Illinois, \$31,-700,000; Iowa, \$29,300 000; Minnesota, \$13 900,000; Indiana, \$7,400,000; Ohio, \$3.100,000; Pennsylvania, \$2,600,000; Maryland, \$2,100,000; and Wisconsin, \$2.150,000.

A cooperative program between the .
U. S. Department of Agriculture and four Midwestern States to increase the production of field corn by control of the European corn borer is now under way. Plans for the program were completed recently at a meeting with agricultural officials from Illinois, Iowa, Wisconsin, and Minnesota, the four participating States.

The Office for Food and Feed Conservation, with the aid of the Bureau of Entomology and Plant Quarantine, is issuing a fact sheet, "Save Corn by Fighting the European Corn Borer," and other informational material to aid in the fight against the destructive pest.

George L. Davis
Office for Food and Feed Conservation

## Biggest Sweetpotatoes Not Best to Consumers

W E all remember how farmers at county-fairs used to compete with each other for blue ribbons on the basis of the size of their products. We remember how the power of soils and the skills of producers were measured in terms of the biggest of everything, irrespective of the fitness of the product for its ultimate use. Many farmers still cling to this custom and continue to count their gains and losses according to the total weight or volume of production.

In order that sweetpotato growers in Louisiana might have more facts suitable for use when adjusting their production to market demands, the Louisiana Agricultural Experiment Station made studies to learn how well the kind and quality of sweetpotatoes grown there succeed in meeting the demands of the users.

#### Study in Chain Store

With the cooperation of a large chain store and the Agricultural Extension Service, a brief study was conducted in the chain's food stores in New Orleans in March 1945. This study recorded consumers' responses to the different grades of Porto Rico sweetpotatoes when sold at various differentials in price.

From the beginning, it was noticed that, next to the general appearance of the sweetpotato, proper size was the thing that influenced consumers most. They selected principally the smaller and medium sizes, and with much care as to uniformity. When interviewed, consumers quickly said that most of the sweetpotatoes they bought were to be oven-baked and that size was important in connection with table use and the time allotted for cooking a meal. They said a large one was too much for an individual serving, would not cook thoroughly in the usual time, and required too much time and fuel. Even for other uses, large sweetpotatoes were found difficult to handle.

This localized study led to broader studies, comprising cross sections of five Louisiana cities and the city of Chicago (La. Bul. 409). In the survey, the chain grocery was joined by other retail-store concerns in providing the sweetpotatoes and the merchandising facilities. Assistance was given to the Experiment Station by the Louisiana State Market Commission.

As a part of these studies, tests were made in the stores to find out more about consumer preference in relation to the size of these potatoes. The display used for the size tests consisted of the U.S. No. 1 grade, divided into three size groups, small, medium, and large. The small ones included those weighing a maximum of 7 ounces. Mediums ranged from 8 to 12 ounces in weight, and the large sizes from 13 to 24 ounces. The three sizes were exhibited side by side and all were marked the same price.

#### Displays Get Attention

Customers viewed these store displays with much interest. Some 3,500 of them, 85 percent of whom were housewives, expressed their preferences when buying a total of 13,521 pounds of sweetpotatoes. Of these purchases, 34.7 percent were small, 49.3 percent were medium, and 16.0 percent were large. In the meantime, it was learned that the average size of the families represented was 3.3 persons, that the size of individual purchases averaged 3.4 pounds, that sweetpotatoes were served these families an average of 2.2 days a week, and that 55 percent of the product was to be oven-baked.

As interest increased in this phase of the research, consumer-preference tests of sizes were extended to studies in Pittsburgh during March 1947 (La. Bul. 422). As the previous studies had indicated that 84 percent of consumer purchases consisted of the small and medium sizes, when the prices were the same for all groups, these two sizes

were combined, and exhibited against the large-size group, with price differences between these two categories.

### Study Preferences

The purpose was to find out the effect of size and price relationship on consumer preference. The duration of the test was divided into three periods. The price of the small-medium was held constantly at 9 cents a pound, while the large were quoted at a declining price scale of 9 cents, 7 cents, and then 5 cents a pound.

During the first period, consumers chose 94 percent small-medium and 6 percent large size. As the price of the large dropped to 7 cents, buying shifted to 61 percent large and 39 percent of the other combined size. It was observed, however, that though the customers were attracted to the large size by the reduced price, they picked out the smallest from that bin, finally leaving only the extra large. When the price of the large was reduced to 5 cents, purchases shifted back to the 9-cent small-medium sweets in the ratio of 52 to 48 percent. The same tests were not applied to the extra small sizes.

#### Grading System Falls Short

These experiments, with their economic implications, clearly indicate that different sizes of sweetpotatoes come properly within different price brackets and should be submitted to the retail trade in size-price combinations that will create the greatest demand by consumers and reflect fair profits for producers and dealers. Good merchandising practices now require that sweetpotatoes be grouped in different sizes for retail-store use. Sizing is necessary also for satisfactory prepackaging. The Louisiana investigators believe the present grading system for sweetpotatoes seems to fall short of the needs of the retail markets.

Now, back to the farm. As to other, more suitable outlets, after the sweet-potato crop has been inspected for salability in the food markets and the undesirables have been assigned to dehydration for feed, it is necessary to find uses for those not suitable for the fresh market.

### What About Potatoes?

What shoppers look for when they are buying potatoes is being studied by the Bureau of Agricultural Economics in a survey under the Research and Marketing Act. Future issues of the Agricultural Situation will carry stories on the results.

Based on the data at hand, it is doubtful that sweetpotatoes weighing more than 19 to 20 ounces each, on the average, can be marketed at distant points in quantity and at a price sufficient to net reasonable margins to growers and dealers. This leaves the off-sizes, both large and small, for other uses. The extra-small ones, when not stringy, are good for canning whole. Then the investigators believe that a large potential outlet awaits the lower priced, off-shaped, and extra-large sweetpotatoes, when sliced uniformly and processed into a quality pack, if the price of the cans is attractive. Restaurants and large families appear to want processed sweetpotatoes that are very reliable in quality and can be bought in quantity at popular price.

In conclusion, it can be safely said that the size of sweetpotatoes should be considered carefully if the entire crop is to be marketed to best advantage. To market a product that will conform more closely to the demands of the different types of markets is a direct challenge alike to sweetpotato producers, to processors, and to dealers.

J. M. Baker Department of Agricultural Economics Louisiana State University

### Wheat Stocks Large

Despite near-record disappearance since last harvest, stocks of wheat on April 1 were nearly 478 million bushels. This is 55 percent larger than a yearlier and 44 percent larger than on April 1, 1946. The supply is sufficient for exports to reach 450 to 500 million bushels and still leave 150 million bushels for carryover.

### 10 YEARS IN POULTRY

### Fewer Farms . . . Many More Eggs

AMONG the most important trends in the poultry industry in the last decade or so has been the decline in the number of farms producing eggs and an increase in output. From 1934 to 1944 the number producing eggs dropped from about 5½ millions to 4¾ millions, or 15 percent, but production of eggs rose more than half.

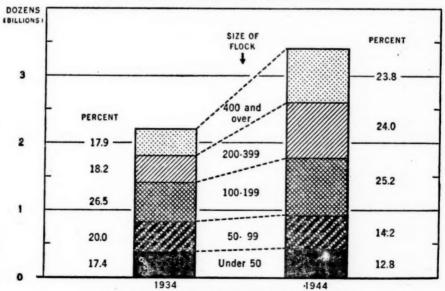
The trend toward larger flocks was the main reason for the drop in the number of farms of farms producing eggs. In 1934, 80 percent of the farms had less than 100 birds and produced 37 percent of the eggs. Ten years later, only 72 percent of the farms had less than 100 birds and produced about 27 percent of the eggs. On the other hand, the number of farms with more than 200 birds rose from almost 6 percent in 1934 to more than 11 percent in 1944.

As a result, the proportion of eggs produced by the larger farms increased from 36 percent in 1934 to almost 50 percent a decade later.

The most significant changes occurred in the New England, Middle Atlantic and North Central States. In each region, the number of farms with more than 200 birds at least doubled. Little change in either the size or distribution of flocks occurred in the Mountain and Pacific States, where the poultry industry already was commercialized by the early 1930's. Moderate shifts from small to large flocks took place in the South Central States. In East South Central and West South Central States, however, most of the eggs are still produced by flocks of less than 100 birds.

GERSON LEVIN
Bureau of Agricultural Economics

### EGG PRODUCTION CLASSIFIED BY SIZE OF FLOCK, UNITED STATES, 1934 AND 1944\*



\*BASED ON U.S. CENSUS DATA ON EGG PRODUCTION CLASSIFIED BY SIZE OF FLOCK ON FOLLOWING JANUARY I

### HOW MUCH

### Can We Increase Production

W HAT is the productive capacity of American agriculture? The answer to this question is of world-wide import today. Until European agriculture is rehabilitated, our agricultural production is as vital to European countries as it is to us. Other parts of the world are concerned as well.

How much more can American agriculture produce if the need is sufficiently urgent? Its production of food and other farm products for human use was at an all-time high in 1946. brought there by a combination of favorable weather and the stimulations of war that spurred individual effort and the application of improved techniques. Can we do better than that if the need should become greater? And, if necessary, can we take other measures that will have the effect of increasing output-such measures as reducing wastes and using more direct consumption foods?

### A Drop in 1947

We did not maintain the same high level of production in 1947. Apparently had our corn crop been as large as might have been expected with average weather, the output would have been nearly as large. In 1946, output exceeded the 5-year prewar average by 33 percent. In 1947 with the short crop of corn, final figures will probably show that we exceeded that average by 29 percent.

Do these figures represent the limit of our present production capacity? Is all of our agricultural land under effective use and could we push it to further production without permanently damaging the soil? If the need should become more urgent, must we put more land into farm use regardless of cost? Would we have to have still higher prices if we were to reach for a higher production goal?

Weather is one of the most powerful influences on farm production. We have found no way of controlling it as yet. One severe drought could reduce our huge output in any year as much as 20 percent, and might leave after effects in the way of reduced flocks and herds that would hold down production somewhat for several years thereafter.

#### Time Needed

But with average weather and with enough time to put through the changes we would have to make in our farmproduction plant, the only practical limitation to our farm output would be the capital and the labor that we would consider profitable or necessary to use in farm production. But the most urgent need for food is now and in the next two or three years. We can put more land into use but it would take time to clear, or drain, or irrigate it. Some of the land would require two of these operations. It would be costly in any event. One way to get the effect of more farm land is to use more tractors and fewer horses and mules, thus releasing more land that is already suited to food crops.

Other changes could have immediate effect. More lime and more fertilizer used with closer discrimination, varieties of crops that give higher yields, feeding rations balanced to bring better results, and other well-tested practices could increase quickly our farm output, per animal and per acre. But some farmers would be able to do these things more readily, more speedily, and more effectively than the main body of farmers could be expected to do.

The average farmers would have to learn and try out several of these things before they could hope for success, and all farmers, generally speaking, would want to know that these changes and new methods would pay. They would want to depend on several years of good prices for their products, not just one. If their investments were large or the changes of a permanent nature they would hope for some assurance of a somewhat stabilized favorable relation

between farm costs and the prices they receive for what they sell.

### Increase Would Pay

A study made 4 years ago indicated that under prosperity conditions it would pay farmers to increase output. over several years, about 43 percent above the average for 1935-39 by adopting known improvements in agriculture. This would be slightly more than 7 percent above our peak production in 1946. This could be done without further depletion of our soils if good use is made of fertilizer, advantageous rotations, and other conservation measures. With these practices well applied, we could rely on getting most of this increase in higher production per acre and per animal.

But these are possibilities that cannot be realized in 1 year. Actually with our decreased grain supply, and hindered livestock production it would probably take us several years to reach that goal, with average weather, unless the incentives were very great, or the weather unusually favorable.

### Specific Products

What about the production of certain specific products especially needed? Food grains stand high among them. Can we continue to grow as much wheat as during the last few years without seriously hurting the farms? We cannot expect to continue wheat production at the peak reached in 1947. But with summer fallowing, stubble mulching, strip cropping, contour farming, and other practices adapted to specific areas we should be able to maintain wheat production at sufficiently high levels to meet the presently anticipated needs for export in addition to our own requirements.

If more wheat is needed a greater acreage can be grown in the wheat areas that have higher rainfall, replacing some crop that is less needed.

But how make the shifts to commodities that are most needed? Price and cost relationships that favor the most needed commodities seem to be the answer. They are the real inducements and they will help to defray the very real costs and inconveniences of shifting. Some direct aids might help, as

providing seed or fertilizer. But price and income inducements to shifting need to cover a longer period than one crop year in order to compensate farmers for the cost of change-overs.

### Desirable Diet Changes

By and large, and over a period of years, the desirable changes in the average diet are more milk, eggs, and meat, more fruit and more vegetables. But if necessary to conserve foods cheaper cuts of meat can be used, and more cereals, potatoes, and breads, and we could make more use of skim milk powder in diets. It is estimated that enough food for 25 to 30 million additional people a year could be provided for, compared with 1946 consumption, if we made such changes; and our average diet could still be adequate. (Of course we know that even with our present large consumption, very many individuals and families are not well nourished.)

Wastes have always disturbed the few and prevailed for the many. On the farms the harvests are often incomplete and there are losses because of spoilage and pests. Transportation wastes have had considerable attention but losses persist. Processing, wholesaling and retailing each has its losses, and losses and wastes of several kinds in many homes and public eating places were notorious before the war and are not yet eliminated.

It is estimated that a reasonably rigorous sustained effort to reduce losses and wastes might provide food for several million people. It is evident, therefore, that we have several flexibilities in our food potential. How to make the most of them becomes the question.

Going back to the question of production on our farms, it is apparent that many changes will be called for in the next 3 or 4 years. These might involve larger output. And they are most likely to require changes in crop and livestock production, and in farm operations.

#### Counsel Suggested

It is here suggested that some sort of management counsel could be very effective in helping individual farmers to plan the operation of their entire farms, including desirable changes, and the beginning of improved techniques. Herd-improvement associations and Soil Conservation Districts are already helping on specific aspects on individual farms. For more integrated services, we have examples in the Balanced Farming Associations and the Farm Business Associations in the Midwest.

As a means to speedy adoption of plans worked out by farmers with the help of a management advisory service it might be desirable to provide seed and fertilizer under certain conditions. Additional credit also might be needed for buying equipment, lime, fertilizer, and seeds.

#### Need Trained Men

management counsel program might provide a man of adequate management sense, training, and practical experience in the local area, for each agricultural county. He would work with groups of farmers who have similar types and sizes of farms. In critical areas more intensive work would probably be needed, for the farmers in such places would probably have to make many changes if they are to have the desired results. In critical areas one trained man would be needed for each association of about 50 farms, and the aim would be to have these associations eventually pay for themselves through increased and more efficient production which should actually bring in more cash. Take 50 farms with 10 cows each, say, in a whole-milk area. If the summer slump in milk production were eliminated and other improved practices were introduced, an annual increase of 1.000 pounds of milk per cow could be expected. At \$4.50 for each 100 pounds, the added gross income would be \$450 for each farm, or \$22,500 for the 50 farms.

So much for the years immediately ahead of us. We also have to look forward to a time when less of our food products would be needed abroad, when prices for these products would probably be lower. Then more and probably other kinds of changes would be needed. But in the meantime the farmers would have been making more money. And the farm plans would

have called for the gradual building of a reserve against such contingencies, and the plans should have been so worked out that future costs on the farm would be reduced, possibly in about the same degree as the future gross income would lessen.

### A Flexible Potential

And meantime the research agencies, especially in the more vulnerable areas, would probably have been pressing forward to find out what the new shifts should be and how and when they should probably be made, with actual testing of the findings on practical farms.

With farmers, management counsel, and research agencies all working with both the immediate and the longer future in mind, our food potential could be flexible, and if necessary, decidedly larger than at present. At the same time farmers would be preparing themselves to weather the shocks of changing times.

SHERMAN E. JOHNSON Bureau of Agricultural Economics

### Ask Larger Fall Pig Crop

The nation's hog producers have been urged by the Department of Agriculture to increase pig production this fall by at least 10 percent to provide a minimum of 34,400,000 pigs—3,000,000 more than the total produced in the fall of 1947. These pigs would be marketed in the spring and summer of 1949.

The increase sought in 1948 fall pigs, together with a larger spring pig crop in 1949 would help offset the declines expected in the output of beef, veal, lamb and mutton in 1949 and to keep the total supply of all meats from falling below the 140 pounds per capita for U. S. consumers. This year, 143 to 146 pounds per capita are available compared with the 35-year peak of about 155 in 1947.

Prices of feed grains are expected to be somewhat lower in the 1948-49 feeding year while hog prices probably will continue relatively high.

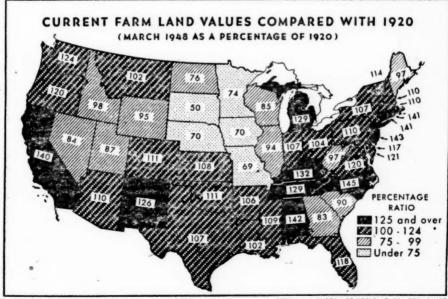
### Farm Land Values Up 7 Percent To Equal the 1920 Peak

AVERAGE farm land values rose 7 percent in the year ending March 1. At that time they were as high as in 1920, when the peak was reached in the land boom following World War 1. Farm product prices averaging much higher than powar and record levels of farm income continued to be the chief inflationary pressures in the farm land market during the last year.

Average farm land values in 32 States are now above their 1920 levels. In some areas industrial or urban developments have helped push farm real estate values above their 1920 levels. In others, particularly the Southwest, irrigation and other land developments have resulted in higher values. More favorable returns from tobacco during

World War II have affected values in Kentucky and North Carolina.

Average values on March 1 in 16 other States, however, were still below 1920 levels and in some of these they were a good deal below. In Scuth Dakota, for instance, average farm real estate values were only one-half those reported in 1920, despite sharp increases in recent years. In this State, as well as in the entire northern plains area, values dropped farther during the 1930's than in the rest of the country. This probably was due to the fact that the droughts of the '30's impressed on farmers and others that long-run prospects for crop production in this area were not as good as they had



BUREAU OF AGRICULTURAL ECONOMICS

Although the trend in farm land values for the U. S., as a whole, continued up during the 12 months ending March 1, the rise was the least of any year since 1942. The Bureau of Agricultural Economics index of average value per acre was 170 on March 1, 7 percent higher than a year earlier. The average rate of increase in land values from 1942 to 1947 was approximately 1 percent per month. The greatest increase in this period was 15 percent for the year ending March 1944.

Sharpest increase in farm land values in the last year were reported for the wheat and range-livestock areas where farm incomes have been unusually high since early in the war. Values in North Dakota were up 20 percent, the greatest rise among the States. South Dakota, Nebraska, and Kansas had increases of 16 percent or more. States bordering these also had sharp gains.

Average values decreased during the last year in only three States—Florida, California, and Louisiana. In the first two, values were affected by lower prices for fruits.

Compared with 1935-39 averages, land values for the U. S. have doubled. This also is true in five of the nine geographic divisions. In the East South Central States, values are now  $2\frac{1}{2}$  times prewar.

A large proportion of the farmers buying land continue to pay cash. In the counties surveyed by the BAE about one-half of the farmers who bought land during recent years paid for it in a lump sum. In the purchases financed by mortgages the down-payments have been large, averaging about two-fifths of the purchase price.

The volume of voluntary sales during the year ending March 1 was down about 15 percent from the previous year's record. Despite this rather sharp decline, the number of sales continued higher than in prewar years. The February break in some commodity markets apparently had not been reflected in farm land prices by March 1. Reports indicated that a few sales were held up but that prices remained firm.

A. R. JOHNSON
Bureau of Agricultural Economics

### Sharp Drop In Cattle On Feed April 1

TWENTY-FIVE percent fewer cattle are estimated to have been on feed for market April 1 in the 11 Corn Belt States than a year earlier. All States in the area shared in the decrease but the reduction was larger in the western part than in the east.

Iowa and Nebraska, two of the leading cattle feeding States, had reductions of 28 percent and 32 percent, respectively. Illinois had a 17 percent decrease, the largest among Eastern Corn Belt States. The 8 percent drop in Wisconsin was the smallest in the Corn Belt. This was the only State in the area that had more cattle on feed January 1 than a year earlier.

Reports from Colorado indicate that the number of cattle on feed was about the same as last year. The movement of replacement feeding cattle into northern Colorado is estimated to be about 40 percent of the record number that were moved in during the first three months of 1947. Fed cattle have been marketed from this area at a somewhat faster rate than for the same period last year. Colorado had 23 percent more cattle on feed on January 1 than at the beginning of 1947.

Reports from cattle feeders show that they marketed cattle more rapidly in January-March than they had planned in January. In addition, the number of cattle put on feed during the three months was smaller than a year earlier. The percentage of steers on feed was higher than a year ago but those of helfers and calves were down. Feeders expect to market these cattle more rapidly than usual, though the proportion marketed before July 1 will be less than in the last 2 years. Cattle feeders who reported on the month in which they expect to market fed cattle said that only a slightly smaller percentage will be marketed before July 1 this year than was reported in April last year.

### More Farmers Own Land, Fewer Are Tenants, Study Shows

MORE and more farmers have become land owners in recent years, and fewer have stayed on the land as

tenant operators.

A little more than a fourth of the Nation's farms were tenant-operated in 1947, according to the January 1947 enumerative survey of the Bureau of Agricultural Economics based on a sample of about 15,000 farm interviews. The survey found that 26.9 percent of the farms were farmed by tenants last year. This figure compares with 31.7 percent tenancy in 1945, as shown by the 1945 Census of Agriculture, and with the peak of 42.4 percent in 1930. The proportion of tenancy has fallen each year since the peak, the decline being especially sharp during the war.

### Less Land Under Lease

The percentage of farm land under lease also went down slightly from 1945 to 1947, the survey indicates. About two-fifths of the World War II veterans who were operating farms in 1947 were tenants.

Many former tenants have not returned to farming since the end of the war. The reasons probably include the continued chance for work elsewhere and the fact that fewer farmers are needed as technological improvements are made in agriculture. On the other hand, many families whose principal income is from other occupations, have bought small acreages in the country that are counted as farms by the Census.

The rate of tenancy has declined more rapidly since 1945 than during the war. In 1947, tenants operated only 26.9 percent of the farms as compared with 31.7 percent in 1945 and 38.7 percent in 1940.

Full-owner operators and managers and part-owner operators increased compared with tenants, according to the figures. This means a decline in tenancy during the 2 years since the The drop occurred throughout the Nation. The greatest relative decline was in the South. Relative increases in part-owners were in the Northeast and South. Analysis of recent tenure trends indicates that the number of farms operated by full owners, particularly those of part-time farmers and those used as rural residences, have increased. Then, many operators who were full owners have rented additional acreages that were formerly farmed by tenants. This increases the relative number of part owners and decreases tenancy. In areas of the South, where the plantation type of farm organization is common, much land formerly worked by tenants is now being operated by the owners.

#### More Are Part Owners

The proportion of farm land operated by tenants also declined slightly during the 2 years-from 22.1 percent to 21.6 percent. At the same time, the proportion of the land operated by part owners increased from 32 percent to 36 percent, while that operated by full owners and managers declined from 45 percent to 42 percent. This relatively large increase in proportion of acreage farmed by part owners was common throughout the country, but was most

marked in the Northeast and South. Only in the West did tenants operate a larger percentage of the land in 1947.

The decline in the percentage of farm land under lease has been at a less rapid rate since the end of the war. Thus, the percentage of farm land under lease was 44.1 in 1940, 39.4 in 1945, and 38.9 in 1947. This was a much less rapid rate than the decline in percentage of tenancy. The difference in rates was due primarily to the increase in rented land worked by part owners. The decline in percentage of farm land under lease, which began in the 1930's, continued in the North Central and Western States during the 2-year period, but again increased in the South and Northeast.

#### Few Are Veterans

Interest in the number of veterans of World War II who return to farming continues. Only 5.9 percent of the

farm operators were veterans in 1947. This was 4.7 percent of the owners and managers, and 9.0 percent of the tenants. Veterans represented 7.0 percent of the farm operators in the South, 5.5 percent in the West. 5.0 percent in the North Central States and only 3.0 percent in the Northeast. Approximately 41 percent of the veteran operators of the Nation were tenants.

Considerable land is owned by farm operators in the various tenure groups but is rented to others, according to the survey. In 1947, 14.5 percent of the full-owner operators, 8.9 percent of the part owners, 8.9 percent of the managers, and 2.3 percent of the tenants rented land to someone else. The average acreage rented to others was 95 for full owners, 174.8 for part owners, 353.8 for managers, and 120.1 for tenants.

B. T. INMAN Bureau of Agricultural Economics

### Prices of Farm Products

[Estimates of average prices received by farmers at local farm markets based on reports to the Bureau of Agricul-Average of reports covering the United States weighted according to relative importance of tural Economics. district and State]

	5 year	verage	April 15, 1947	Mar. 15, 1948	April 15, 1948	Parity price, April 15, 1948
Commodity	August 1909-July 1914	January 1935- Decem- ber 1939				
Wheat (bushel)dollarsRye (bushel)do	0. 884 . 720	0.837 .554	2. 40 2. 47 2. 33	2. 21 2. 14	2. 29 2. 17	2. 20 1. 79
Rice (bushel)       do         Corn (bushel)       do         Oats (bushel)       do	.813 .642 .399	.742 .691 .340	1. 63 . 875	3. 01 2. 11 1. 17	3. 03 2. 19 1. 19	2. 02 1. 60 . 994
Barley (bushel)	1. 21 11. 87	. 533 1. 17 8. 87	1. 46 2. 70 17. 20	1. 87 3. 36 19. 70	1. 85 3. 56 19. 40	1. 54 3. 01
Cotton (pound) cents. Cottonseed (ton) dollars.	12. 4 22. 55	10. 34 27. 52	32. 26 88. 00	31. 77 87. 90	34. 10 89. 40	29, 60 30, 88 56, 10
Soybeans (bushel)         do           Peanuts (pound)         cents           Flaxsced (bushel)         dol!ars	1.96 4.8 1.69	3. 55 1. 69	3. 62 10. 4 7. 34	3. 23 10. 1 5. 86	3. 64 10. 2 5. 76	3 2 39 12 0 4 21
Potatoes (bushel)	4. 697 . 878 . 96	. 717 . 807	1 1. 46 2. 33 1 3. 08	1. 96 2. 37 1. 95	2.09 2.40 1.83	1.85 2.19
Oranges on tree (box)dodo	2. 29 7. 27	1. 11 8. 38	1.58	1. 14 21. 80	. 90 20. 60	2, 39 3, 78 18, 10
Beef cattle (hundredweight)do Veal calves (hundredweight)do Lambs (hundredweight)dodo	5. 42 6. 75 5. 88	6. 56 7. 80 7. 79	18.30 1 19.40 1 19.80	20. 70 23. 40 20. 00	21. 90 24. 10 21. 10	13, 50 16, 80 14, 60
Butterfat (pound) centsdollarsdollars	26. 3 1. 60	29. 1 1. 81	68. 5 1 4. 00	80. 3	84. 6 4. 68	64.8 3.73
Chickens (pound) dododo	11. 4 21. 5 18. 3	14. 9 21. 7 23. 8	27. 7 40. 8 1 41. 7	27. 2 42. 6 40. 8	28. 0 42. 6 41. 8	28. 4 44. 9 45. 6

1 Revised.

Adjusted for seasonal variation.

Comparable base price, August 1909-July 1914.
Comparable price computed under sec. 3 (b) Price Control Act.
41919-28 average of \$1.12 per bushel used in computing parity.
41919-28 average for computing parity price.

### Economic Trends Affecting Agriculture

Year and month Year and month (1935-39) (1935-39)		1910-14=100						Index of prices received by farmers (August 1909-July 1914=100)			
	Income of in- dustrial workers	Average	Whole-sale	Prices paid by farmers			Livestock and products				
	(1935-39 = 100) <sup>2</sup>	ings of factory workers	of all com- modi- ties <sup>3</sup>	Com- modi- ties	Com- modities, interest, and taxes	Farm wage rates 4	Dairy prod- ucts	Poul- try and eggs	Meat ani- mals	All live- stock	
1910-14 average.	58 72	50 90	100	100	100	100	100	100	101	101	101
1915-19 average. 1920-24 average.	75	122	152 221	158 160	151 161	150 173	148	148 159	163	123	158
1925-29 average.	98	129	232	143	155	168	179	160	155	148	15
1930-34 average.	74	78	179	107	122	135	115	105	94	85	93
1935-39 average	100	100	199	118	125	128	118	119	109	119	117
1940-44 average.	192	234	325	139	150	147	212	162	146	171	16
1945 average	203	290	403	154	180	172	350	197	196	210	203
1946 average	170	270	391	177	202	1 193	378	242	198	256	246
1947 average	187	323	438	222	246	231	408	269	221	340	293
1947											
April	187	309	423	216	243	229	397	257	204	331	282
May	185	313	432	215	242	228		241	203	327	275
June	184	319	440	216	244	230		233	205	338	278
July	5 176	313	436	220	244	230	404	244	220	343	286
August	182	324	436	224	249	234		258	224	349	295
September	8 187	337	448	230	253	238		282	246	367	315
October	190	6 339	454	231	254	239	404	283	251	360	313
November	192 192	5 343 5 354	457 5 469	233 238	257 262	241 245		293 311	242 262	338 352	304 320
1948	192	- 354	- 469	208	262	245		311	262	332	320
January	193	350	465	242	266	251	425	313	231	379	328
February	8 194	346	462	235	263	248	720	307	218	331	300
March	192	940	102	236	262	247		298	212	342	302
April				200	264	249	420	296	214	347	304

	"Index of prices received by farmers (August 1909-July 1914=100)									1
Year and month	Crops								All	Donley
	Food grains	Feed grains and hay	To- bacco	Cotton	Oll- bearing crops	Fruit	Truck crops	All	crops and live- stock	Parity ratio
1910-14 average	100	101	102	96	98	99		99	100	100
1915-19 average	193	164	187	168	187	125		168	162	106
1920-24 average	147	126	192	189	149	148	7 143	160	151	86
1925-29 average	140	119	172	145	129	141	140	143	149	89
1930-34 average	70	76	119	74	72		106	86	90	66
1935-39 average	94	95	175	131	106	83	102	97	107	84
1940-44 average	123	119	245	131	159	133	172	143	154	103
1945 average	172	161	366	171	215		224	201	202	117
1946 average	201	195	382	228	244	226	204	226	233	121
1947 average	271	246	380	261	335	194	249	261	278	120
1947										
April	277	223	387	260	358		295	269	276	121
May	276	218	390	270	326		286	268	272	119
June	253	240	390	275	318		215	262	271	118
July	251	253	390	289	314		189	263	276	120
August	246	270	383	267	308	177	211	255	276	118
September	278	297	352	252	311	181	179	254	286	120
October	302	284	357	247	344	166	238	261	289	121
November	312	283	354	257	349	151	272	268	287	119
December	318	305	377	275	367	149	294	281	301	123
1948		- 1								
anuary	322	318	377	267	377	135	320	284	307	122
February	251	261	374	248	333	136	320	257	279	112
March	260	284	372	256	339	140	295	262	283	115
April	268	291	371	275	351	142	340	276	291	117

<sup>&</sup>lt;sup>1</sup> Federal Reserve Board represents output of mining and manufacturing; monthly data adjusted for seasonal

<sup>1</sup> rederal Reserve Board represents output of Management and Interstate Commerce Commission on pay realism.

2 Computed from data furnished by Bureau of Labor Statistics and Interstate Commerce Commission on pay rolls in mining, manufacturing, and transportation; monthly data adjusted for seasonal variation. Revised April 1947.

3 Bureau of Labor Statistics.

4 Monthly data adjusted for seasonal variation.

5 Revised.

6 Ratio of prices received to prices paid for commodities, interest, and taxes.

### **Outlook Highlights**

(Continued from page 2)

Milk production in the first quarter of this year was at an annual rate of 115 billion pounds compared with 121 billion pounds a year earlier. If 1948 crops and pastures are average, however, total milk flow for this year will be only moderately less than in 1947.

U. S. consumers used about the same amount of fluid milk and cream in January-March as a year earlier. But only 38 percent of the milk produced on farms was used in manufacturing. the least for any other first quarter on record.

Farm egg prices were unchanged from mid-March to mid-April at an average of 42.6 cents per dozen. Prices are likely to continue above last year. Chicken prices are not likely to change much the rest of the year.

A sharply rising rate of lay has been one of the major trends in the poultry industry in the last decade or so. Since 1934, the rate of lay has gone up an average of 3 percent a year. In 1947, the annual rate of production per hen and pullet on farms January 1 was 127 eggs compared with 91 in 1928.

Main reasons for the increase: 1, better breeding: 2, the shift from farm hatchings to commercial hatchings which resulted in a more rapid spread of improved strains: 3. better management: 4. better feeding.

Regional changes in the rate of lay The East and West are striking. North Central States were up 42 and 48 percent from the late 1920's. In the North Atlantic region, the gain was 40 percent. On the other hand, increases in the South Atlantic, South Central and Western areas were only about one-fifth.

Hubrid corn seed will be used on about three-fourths of the land farmers will plant to corn this year. This is one big reason why the crop, given average growing weather, may be about 10 percent higher than the average for the 1920's even though farmers may plant the smallest acreage in half a century. Other reasons for the increase in national corn yields in the last two decades: improved methods of tillage, greater use of fertilizer, larger acreage in the higher-yielding areas of the Middlewest and smaller acreages in the South.

PRIVATE USE TO AVOID OF POSTAGE, \$300 PAYMENT

DEPARTMENT OF AGRICULTURE BUREAU OF AGRICULTURAL ECONOMICS UNITED

16